

REMARKS

Specification

It is stipulated that all related co-pending applications to the present invention be notified to the Examiner under 37 CFR 1.56.

The Examiner is directed to a related co-pending application, Serial No. 09/911,972 ('972 co-pending application) filed July 24, 2001, which has been allowed on August 27, 2002. Because of the similarity of claim 9 of the present application to claim 5 of the '972 application, claim 9 and dependent claims 10 to 16 have been canceled.

The Examiner is also referred to the prior art, Igarashi et al. (USP 5,814,894) and Tsukagoshi et al. (USP 6,113,728), which were cited against the '972 co-pending application.

We will file a terminal disclaimer for '972 co-pending application if deemed to be necessary.

To be more descriptive, the title has been changed: Method of Manufacturing Multiple Semiconductor Chips from a Single Wafer.

Claim Objections

Claims 10 to 16 have been objected to for allegedly being substantially duplicates of claims 1 to 8. Claims 9 to 16 have been canceled. Thus, this objection has been rendered moot.

Double Patenting

Claims 1 to 16 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 6 of copending Application No. 09/911,924. A terminal disclaimer will be filed upon the allowance of this present application to overcome the provisional obviousness-type double patenting rejection if th.

Claim Rejections – 35 USC §102

Claims 1 to 16 have been rejected as being anticipated by Tani et al. ("Tani") As it is stated in the office action, Tani does not show measuring the semiconductor devices in a state that the adhesive sheet is glued to the resin layer. However, it is alleged simply that it is inherent that the devices are tested prior to packaging.

It is submitted that Tani does not disclose, teach or suggest "measuring the semiconductor devices **in a state that the adhesive sheet is glued to the resin layer**" in claim 1 or 9. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegual Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). No where does Tani disclose explicitly or inherently the above feature including the bolded language. Thus, claims 1 and 9 and their dependent claims are not anticipated by Tami at least for this reason.

Although claim 9 has been canceled, we point out for the record as follows. It is alleged that Tani shows "peeling the resin layer from the adhesive sheet after performing the measurement of the semiconductor devices; and directly storing the semiconductor device peeled from the adhesive sheet in a carrier tape," as claimed in claim 9. No where does Tani disclose these features. Tani's Column 5 and particularly lines 63 to 65 merely states that the dicing sheet is applied to the side of the common resin layer 35 to overcome the problem of adhesive deposits. Tani also does not disclose directly storing the semiconductor device in column 6 or anywhere else. Thus, claim 9 is novel over the cited prior art for the same reason as claim 1 as well as for containing the above indicated features.

Dependent claims 2 to 8, which depends from claim 1 directly or indirectly, are not anticipated at least for the same reason as claim 1. Claims 9 to 16 have been canceled.

Attached is a marked-up version of the changes being made by the current amendment.

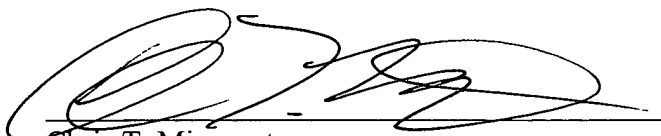
Applicant : Koji Iketani et al.
Serial No. : 09/900,093
Filed : July 6, 2001
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Attorney's Docket No.: 10417-088001 / F51-
134014M/TOM

Applicant asks that all claims be allowed. Please apply any charges or credits to Deposit
Account No. 06-1050.

Respectfully submitted,

Date: 10/24/02



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Version with markings to show changes made

In the specification:

Paragraph beginning at page 1, line 1 has been amended as follows:

Method of Manufacturing Multiple Semiconductor Chips from a Single Wafer

In the claims:

Claims 9 to 16 have been cancelled.

Claims 1 and 6 have been amended as follows (unamended claims are shown in bold, small type-face for ease of reference purposes only):

1. (Amended) A method for manufacturing a semiconductor device comprising [steps of]:
fixing semiconductor chips onto a substrate;
covering the semiconductor chips fixed onto the substrate with a common resin layer;
gluing an adhesive sheet onto the resin layer;
cutting the substrate and the resin layer in a state that the adhesive sheet is glued to the resin layer; and

measuring the semiconductor devices in a state that the adhesive sheet is glued to the resin layer.

2. A method for manufacturing a semiconductor device according to claim 1,
wherein the substrate and the resin layer is cut from the reverse surface of the substrate in a state that the adhesive sheet is glued to the resin layer.

3. A method for manufacturing a semiconductor device according to claim 1,
wherein the substrate and the resin layer which are cut are integrally supported by the adhesive sheet.

4. A method for manufacturing a semiconductor device according to claim 1,
wherein the substrate and the resin layer is cut by performing dicing in a state that the adhesive sheet is glued to the resin layer.

5. **A method for manufacturing a semiconductor device according to claim 1, wherein external electrodes are provided on the reverse surface of the substrate and electrically connected to the semiconductor chips.**

6. (Amended) A method for manufacturing a semiconductor device according to claim 1, further comprising [a step of]:

flattening the surface of the resin layer after covering the semiconductor chips with the resin layer.

7. **A method for manufacturing a semiconductor device according to claim 1, wherein the circumferential edge of the adhesive sheet is fixed to a metal frame.**

8. **A method for manufacturing a semiconductor device according to claim 7, wherein a plurality of the substrates are glued to the adhesive sheet.**

9. (Canceled) A method for manufacturing a semiconductor device according to claim 1, further comprising steps of:

fixing semiconductor chips onto a substrate;

covering the semiconductor chips fixed onto the substrate with a common resin layer;

gluing an adhesive sheet onto the resin layer;

cutting the substrate and the resin layer in a state that the adhesive sheet is glued to the resin layer;

measuring the semiconductor devices in a state that the adhesive sheet is glued to the resin layer;

peeling the resin layer from the adhesive sheet after performing the measurement of the semiconductor devices; and

directly storing the semiconductor device peeled from the adhesive sheet in a carrier tape.

10. (Canceled) A method for manufacturing a semiconductor device according to claim 9, wherein the substrate and the resin layer is cut from the reverse surface of the substrate in a state that the adhesive sheet is glued to the resin layer.

11. (Canceled) A method for manufacturing a semiconductor device according to claim 9, wherein the substrate and the resin layer which are cut are integrally supported by the adhesive sheet.

12. (Canceled) A method for manufacturing a semiconductor device according to claim 9, wherein the substrate and the resin layer is cut by performing dicing in a state that the adhesive sheet is glued to the resin layer.

13. (Canceled) A method for manufacturing a semiconductor device according to claim 9, wherein external electrodes are provided on the reverse surface of the substrate and electrically connected to the semiconductor chips.

14. (Canceled) A method for manufacturing a semiconductor device according to claim 9, further comprising a step of:
flattening the surface of the resin layer after covering the semiconductor chips with the resin layer.

15. (Canceled) A method for manufacturing a semiconductor device according to claim 9, wherein the circumferential edge of the adhesive sheet is fixed to a metal frame.

16. (Canceled) A method for manufacturing a semiconductor device according to claim 10,
wherein a plurality of the substrates are glued to the adhesive sheet.